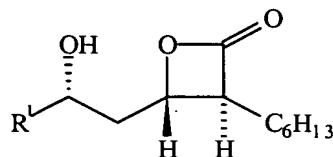


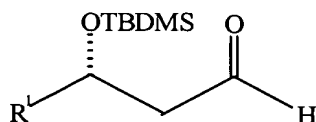
1. (Original) A process for preparing oxetan-2-one of Formula I,



FORMULA I

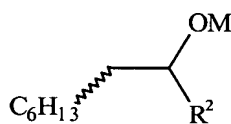
comprising the steps of:

- a. reacting an aldehyde of Formula II



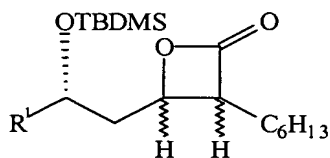
FORMULA II

with a metal enolate of Formula III



FORMULA III

to give a diastereomeric mixture of trans-oxetan-2-one of Formula IV



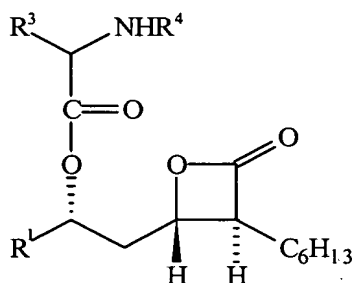
FORMULA IV (SSS+SRR)

- 10 b. hydrolyzing the diastereomeric mixture of trans-oxetan-2-one of
11 Formula IV to form the compound of Formula I; and
- 12 c. separating of diastereomerically pure oxetan-2-ones of Formula I by
13 crystallization,
- 14 wherein R¹ is undecyl or 2Z,5Z-undecadienyl and R² is selected from the group
15 consisting of F, substituted or unsubstituted aryloxy, arylsulfanyl and heteroaryl,
16 and M is selected from the group consisting of a monovalent metal, a divalent
17 metal, a trivalent metal and a tetravalent metal.
- 1 2. (Original) The process of claim 1, wherein R² is phenoxy or 1-benzotriazolyl and
2 M is lithium, MgBr, ZnCl or Ti(OR)₃ wherein R is alkyl.
- 1 3. (Canceled)
- 1 4. (Canceled)
- 1 5. (Original) The process of claim 1, wherein the reaction of the aldehyde of
2 Formula II with the metal enolate of Formula III is carried out at a temperature of
3 from about -120 °C to about -70 °C.
- 1 6. (Canceled)
- 1 7. (Original) The process of claim 1, wherein the reaction of the aldehyde of
2 Formula II with the metal enolate of Formula III is quenched by addition of an acid
3 or a salt solution and the compound of Formula IV is recovered by extraction.
- 1 8. (Original) The process of claim 7, wherein the acid is hydrochloric acid and the
2 salt solution is ammonium chloride.
- 1 9. (Original) The process of claim 1, wherein the hydrolysis of the diastereomeric
2 trans-oxetan-2-one of Formula IV is carried out in the presence of an acidic
3 catalyst and a polar solvent.

- 1 10. (Original) The process of claim 9, wherein the acidic catalyst is selected from the
2 group consisting of an acid, a salt of a weak base, an acidic ion-exchange resin and
3 acidic silica gel.
- 1 11. (Original) The process of claim 10, wherein the acid is hydrofluoric acid or
2 hydrochloric acid.
- 1 12. (Original) The process of claim 10, wherein the salt of a weak base is ammonium
2 fluoride or pyridinium-4-toluenesulphonate.
- 1 13. (Canceled)
- 1 14. (Canceled)
- 1 15. (Canceled)
- 1 16. (Canceled)
- 1 17. (Canceled)
- 1 18. (Canceled)
- 1 19. (Original) The process of claim 1, wherein the hydrolysis of the compound of
2 Formula IV is carried out at a temperature from about -20 °C to about 120 °C.
- 1 20. (Canceled)
- 1 21. (Original) The process of claim 1, wherein the diastereomerically pure oxetan-2-
2 ones of Formula I are separated by crystallization from an aliphatic hydrocarbon
3 solvent.
- 1 22. (Canceled)
- 1 23. (Original) The process of claim 1, wherein the diastereomerically pure
2 oxetan-2-ones of Formula I are separated by crystallization from a mixture of an
3 aliphatic hydrocarbon solvent and at least one of an aromatic hydrocarbon, an
4 ether, a chlorinated hydrocarbon, an ester, a ketone.

1 24. (Canceled)

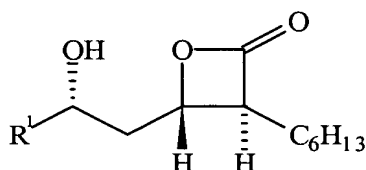
2 25. (Original) A process for preparing a compound of Formula V



3 **FORMULA V**

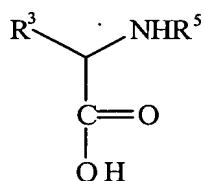
4 comprising the steps of:

5 a. treating an oxetan-2-one of Formula I



6 **FORMULA I**

7 with an acid or acid anhydride of Formula VI

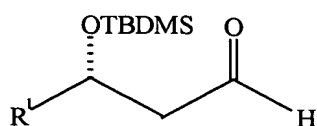


8 **FORMULA VI**

9 or a mixed anhydride thereof, and dicyclohexylcarbodiimide;

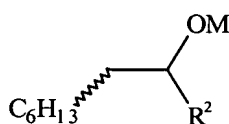
10 b. cleaving off R⁵; and

- 11 c. reacting with an alkanoylating agent having an R⁴ group to introduce the
12 group R⁴,
- 13 wherein R¹ undecyl or 2Z,5Z-undecadienyl, R³ is isobutyl or carbamoylmethyl, R⁴ is
14 formyl or acetyl, and R⁵ is an amino protecting group.
- 15 26. (Original) The process of claim 25, wherein R⁵ is benzyloxycarbonyl or p-
16 nitrobenzyloxycarbonyl.
- 1 27. (Original) The process of claim 25, wherein the alkanoylating agent is an acid
2 anhydride of R⁴-COOH or R⁴X wherein X is a halide.
- 1 28. (Currently Amended) The process of claim 27 ~~29~~, wherein the alkanoylating agent is
2 formic acid anhydride, acetic anhydride, formyl halide or acetyl halide.
- 1 29. (Canceled)
- 1 30. (Canceled)
- 1 31. (Original) The process of claim 25, wherein the treatment of oxetan-2-one of
2 Formula I with the acid of Formula VI is performed in the presence of
3 dimethylaminopyridine.
- 1 32. (Original) The process of claim 25, wherein the treatment of oxetan-2-one of
2 Formula I with the acid of Formula VI is performed at a temperature from about -20
3 °C to about 40 °C.
- 1 33. (Canceled)
- 1 34. (Original) A compound prepared by a process comprising the steps of:
2 a. reacting an aldehyde of Formula II



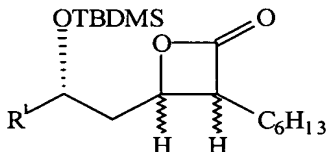
FORMULA II

with a metal enolate of Formula III



FORMULA III

to give a diastereomeric mixture of trans-oxetan-2-one of Formula IV



FORMULA IV (SSS+SRR)

b. hydrolyzing the diastereomeric mixture of trans-oxetan-2-one of Formula IV to form the compound of Formula I; and

c. separating of diastereomerically pure oxetan-2-ones of Formula I by crystallization,

wherein R^1 is undecyl or 2Z,5Z-undecadienyl and R^2 is selected from the group consisting of F, substituted or unsubstituted aryloxy, arylsulfanyl and heteroaryl, and M is selected from the group consisting of a monovalent metal, a divalent metal, a trivalent metal and a tetravalent metal.